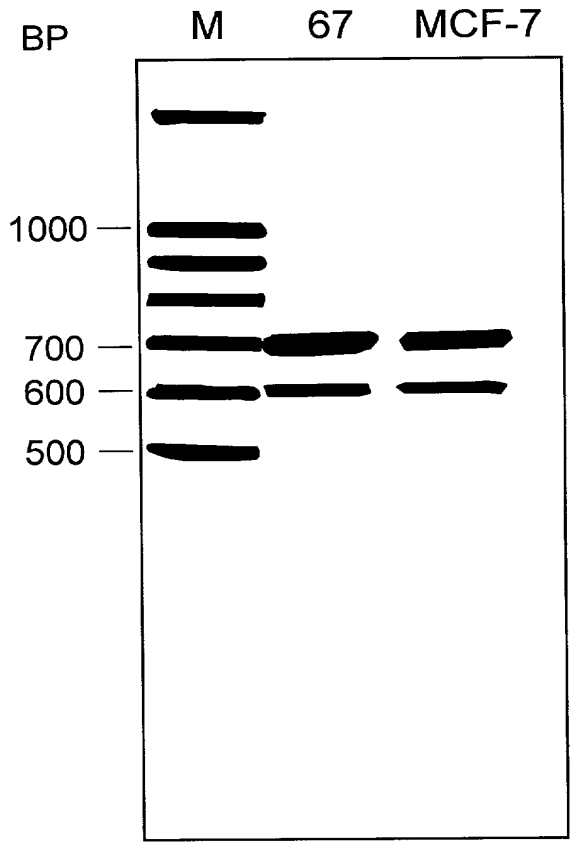

FIG. 1

```
  1 ATGCAGTGGGCCGTGGGCCGGCGGTGGGCGTGGGCCGCGCTGCTCCTGGCTGTCGCAGCG  60
    M  Q  W  A  V  G  R  R  W  A  W  A  A  L  L  L  A  V  A  A

 61 GTGCTGACCCAGGTCGTCTGGCTCTGGCTGGGTACGCAGAGCTTCGTCTTCCAGCGCGAA 120
    V  L  T  Q  V  V  W  L  W  L  G  T  Q  S  F  V  F  Q  R  E

121 GAGATAGCGCAGTTGGCGCGGCAGTACGCTGGGCTGGACCACGAGCTGGCCTTCTCTCGT 180
    E  I  A  Q  L  A  R  Q  Y  A  G  L  D  H  E  L  A  F  S  R

181 CTGATCGTGGAGCTGCGGCGGCTGCACCCAGGCCACGTGCTGCCCGACGAGGAGCTGCAG 240
    L  I  V  E  L  R  R  L  H  P  G  H  V  L  P  D  E  E  L  Q

241 TGGGTGTTCGTGAATGCGGGTGGCTGGATGGGCGCCATGTGCCTTCTGCACGCCTCGCTG 300
    W  V  F  V  N  A  G  G  W  M  G  A  M  C  L  L  H  A  S  L

301 TCCGAGTATGTGCTGCTCTTCGGCACCGCCTTGGGCTCCCGCGGCCACTCGGGGGAGACG 360
    S  E  Y  V  L  L  F  G  T  A  L  G  S  R  G  H  S  G  E  T

361 GTAGTACACGGGCCTGGTGAGGCAACAGCTGTGGAGTGGGGGCCAAACACATGGATGGTG 420
    V  V  H  G  P  G  E  A  T  A  V  E  W  G  P  N  T  W  M  V

421 GAGTACGGCCGGGGCGTCATCCCATCCACCCTGGCCTTCGCGCTGGCCGACACTGTCTTC 480
    E  Y  G  R  G  V  I  P  S  T  L  A  F  A  L  A  D  T  V  F

481 AGCACCCAGGACTTCCTCACCCTCTTCTATACTCTTCGCTCCTATGCTCGGGGCCTCCGG 540
    S  T  Q  D  F  L  T  L  F  Y  T  L  R  S  Y  A  R  G  L  R

541 CTTGAGCTCACCACCTACCTCTTTGGCCAGGACCCTTGA 579
    L  E  L  T  T  Y  L  F  G  Q  D  P  *
```

FIG. 2

```
1    MQWAVGRRWAWAALLLAVAAVLTQVVWLWLGTQSFVFQREEIAQLARQYA   50
1    MQWAVGRRWAWAALLLAVAAVLTQVVWLWLGTQSFVFQREEIAQLARQYA   50

51   GLDHELAFSRLIVELRRLHPGHVLPDEELQWVFVNAGGWMGAMCLLHASL   100
51   GLDHELAFSRLIVELRRLHPGHVLPDEELQWVFVNAGGWMGAMCLLHASL   100

101  SEYVLLFGTALGSRGHSGRYWAEISDTIISGTFHQWREGTTKSEVFYPGE   150
101  SEYVLLFGTALGSRGHS(117)    [31 AA  WERE DELETED]  GE   119

151  TVVHGPGEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTLF   200
120  TVVHGPGEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTLF   169

201  YTLRSYARGLRLELTTYLFGQDP   223 AA  HUMAN σ1 RECEPTOR PROTEIN
170  YTLRSYARGLRLELTTYLFGQDP   192 AA  HUMAN σ1β RECEPTOR PROTEIN
```

FIG. 3

```
  1 ATGCCGTGGGCCGCGGGACGGCGGTGGGCATGGATCACCCTGATTCTGACTATTATCGCA  60
    M  P  W  A  A  G  R  R  W  A  W  I  T  L  I  L  T  I  I  A

 61 GTGCTGATCCAGGCCGCCTGGTTGTGGCTGGGCACTCAAAACTTCGTCTTCTCTAGAGAA 120
    V  L  I  Q  A  A  W  L  W  L  G  T  Q  N  F  V  F  S  R  E

121 GAAATAGCGCAGCTTGCTCGACAGTATGCGGGGCTGGACCATGAGCTTGCCTTCTCTCGG 180
    E  I  A  Q  L  A  R  Q  Y  A  G  L  D  H  E  L  A  F  S  R

181 CTGATCGTGGAGCTGCGGAGGCTGCACCCAGGCCACGTGCTGCCGGATGAGGAGCTGCAG 240
    L  I  V  E  L  R  R  L  H  P  G  H  V  L  P  D  E  E  L  Q

241 TGGGTATTTGTGAACGCGGGCGGCTGGATGGGCGCCATGTGTATTCTGCACGCCTCGCTG 300
    W  V  F  V  N  A  G  G  W  M  G  A  M  C  I  L  H  A  S  L

301 TCTGAGTACGTGCTGCTCTTCGGCACCGCCCTGGGCTCCCATGGCCATTCGGGAGAGACA 360
    S  E  Y  V  L  L  F  G  T  A  L  G  S  H  G  H  S  G  E  T

361 GTTGTACACGGGCCTGGAGAAGCAACGGCTCTGGAGTGGGGACCAAACACGTGGATGGTG 420
    V  V  H  G  P  G  E  A  T  A  L  E  W  G  P  N  T  W  M  V

421 GAGTACGGCCGGGGTGTTATTCCGTCTACCCTGTTCTTTGCACTAGCCGACACCTTCTTC 480
    E  Y  G  R  G  V  I  P  S  T  L  F  F  A  L  A  D  T  F  F

481 GGCACCCAGGACTACCTCACACTCTTCTATACCCTTCGGGCCTATGCCCGGGGCCTCCGG 540
    G  T  Q  D  Y  L  T  L  F  Y  T  L  R  A  Y  A  R  G  L  R

541 CTTGAGCTTACCACCTACCTCTTTGGCCAAGACTCCTGA 579
    L  E  L  T  T  Y  L  F  G  Q  D  S  *
```

FIG. 4

```
1    MPWAAGRRWAWITLILTIIAVLIQAAWLWLGTQNFVFSREEIAQLARQYA 50
1    MPWAAGRRWAWITLILTIIAVLIQAAWLWLGTQNFVFSREEIAQLARQYA 50

51   GLDHELAFSRLIVELRRLHPGHVLPDEELQWVFVNAGGWMGAMCILHASL 100
51   GLDHELAFSRLIVELRRLHPGHVLPDEELQWVFVNAGGWMGAMCILHASL 100

101  SEYVLLFGTALGSHGHSGRYWAEISDTIISGTFHQWKEGTTKSEVFYPGE 150
101  SEYVLLFGTALGSHGHS (117) [31 AA WERE DELETED]    GE 119

151  TVVHGPGEATALEWGPNTWMVEYGRGVIPSTLFFALADTFFGTQDYLTLF 200
120  TVVHGPGEATALEWGPNTWMVEYGRGVIPSTLFFALADTFFGTQDYLTLF 169

201  YTLRAYARGLRLELTTYLFGQDS* 223 AA  σ1 RECEPTOR PROTEIN
170  YTLRAYARGLRLELTTYLFGQDS* 192 AA  σ1β RECEPTOR PROTEIN
```

FIG. 5

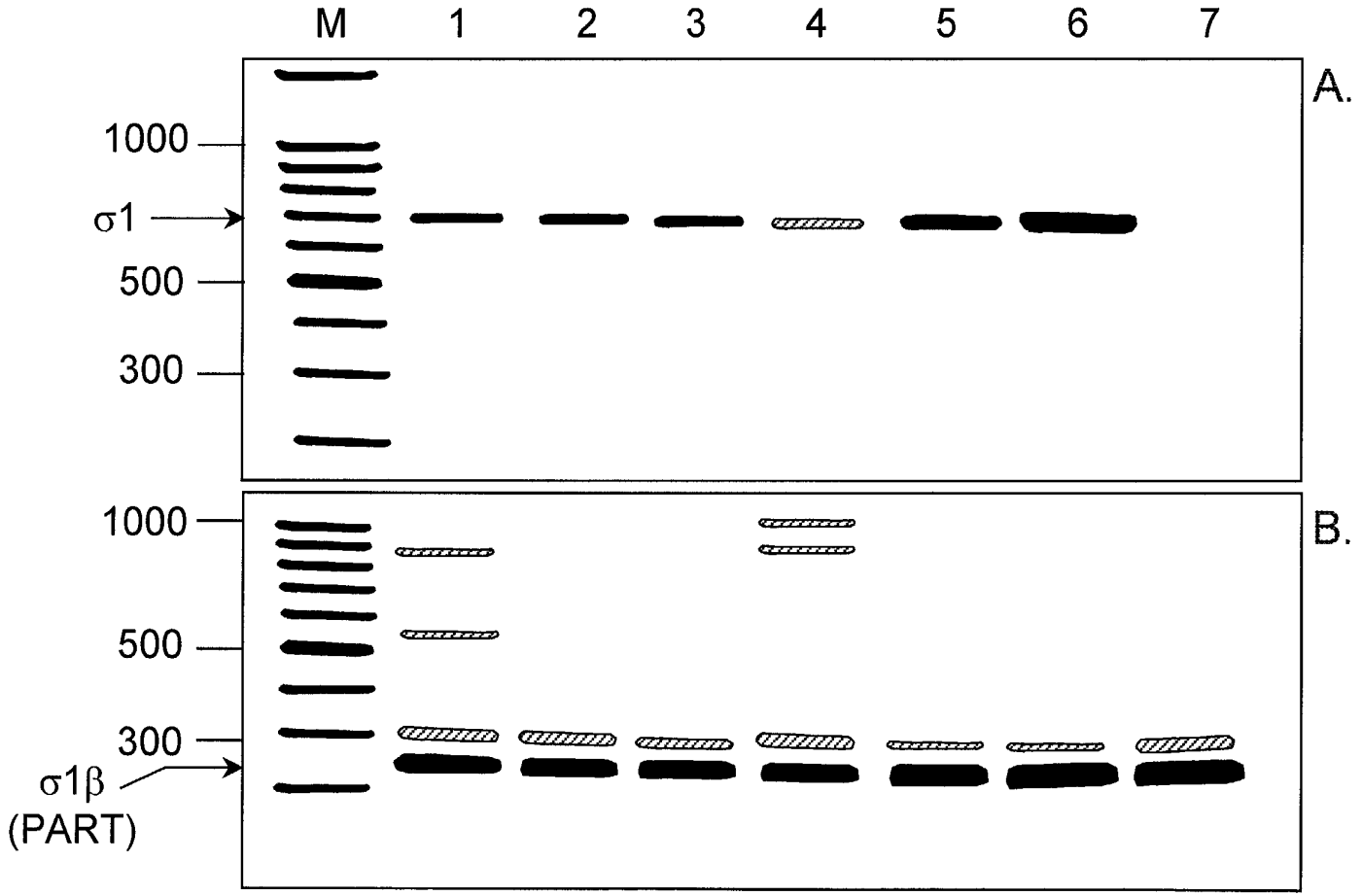

FIG. 6

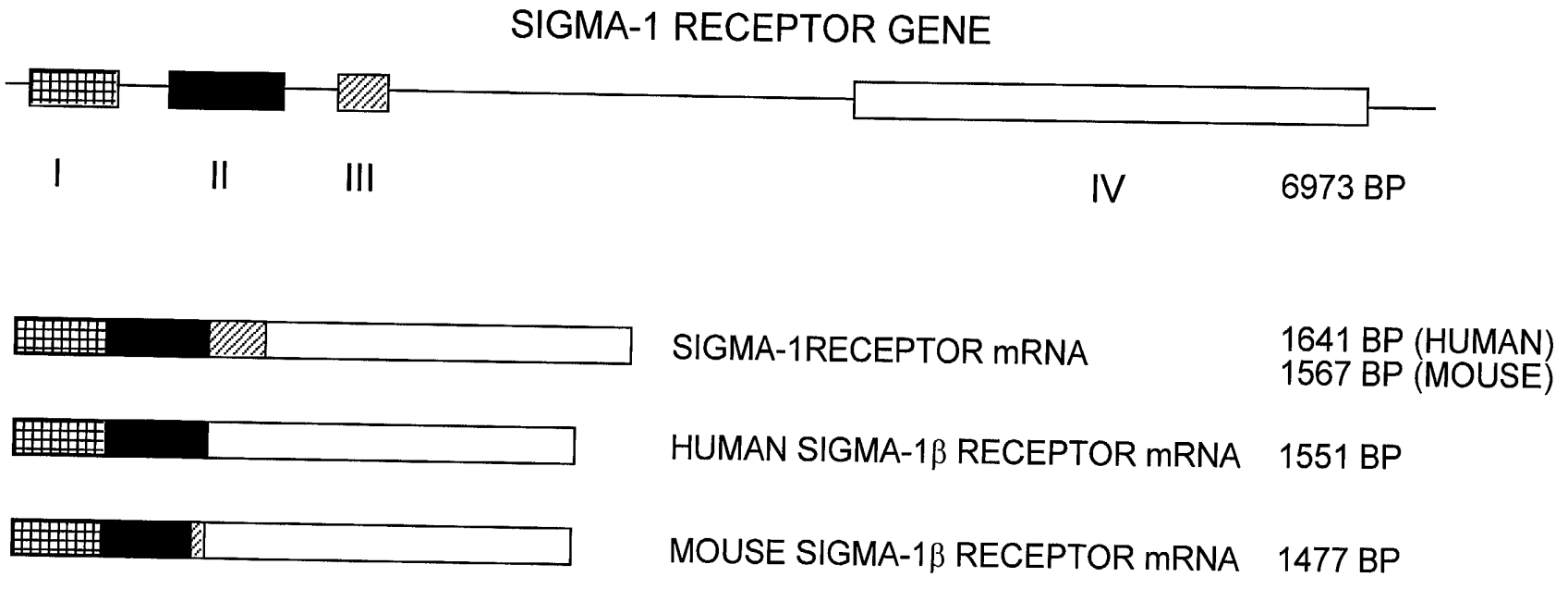
SIGMA-1 RECEPTOR GENE
I
II
III
IV
6973 BP
SIGMA-1RECEPTOR mRNA
1641 BP (HUMAN)
1567 BP (MOUSE)
HUMAN SIGMA-1β RECEPTOR mRNA
1551 BP
MOUSE SIGMA-1β RECEPTOR mRNA
1477 BP

FIG. 7